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Descrizione fisica	1 online resource (723 pages)
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Soggetti	Electromagnetic waves - Measurement
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Mathamatical Principles related to Modern system Analysis -- Matrix Pencil Method (MPM) -- The Cauchy Method -- Applications of the Hilbert Transform: A Nonparametric method for Interpolation/Extrapolation of data -- The Source Reconstruction Method -- Planar near-field to far-field transformation using a single moving probe and a fixed probe arrays -- Spherical Near-field to Far-field transformation -- Deconvolving Measured Electromagnetic Responses -- Performance of Different Functionals for Interpolation /Extrapolation of Near/Far Field Data -- Retrieval of free space radiation patterns from measured data in a non-anechoic environment.
Sommario/riassunto	"This book describes new method of characterization of electromagnetic wave dynamics and measurement, which are based on modern computational and digital signal processing techniques. The book introduces modern computational concepts in electromagnetic system characterization and introduce modern signal processing algorithms not only to enhance the resolution but also extract information from electromagnetic systems that is not currently possible, for example, generation of the non-minimum phase or for that matter the transient response given amplitude only data. The author covers model based parameter estimation and planar near field

to far field transformation, as well as spherical near field to far field transformation. Electromagnetism is the physics of the electromagnetic field: a field, encompassing all of space, which exerts a force on those particles that possess a property known as electric charge, and is in turn affected by the presence and motion of such particles. The design of circuits that use the electromagnetic properties of electrical components such as resistors, capacitors, inductors, diodes and transistors to achieve a particular functionality."--
